

spurred petal, on which the pollen collects very abundantly, and thence probably finds its way into the interior of the stigma; the stigmatic head being readily capable of being pushed into the groove of the claw of the petal amid these hairs, a process which Mr. Ralph thinks is performed by the assistance of insects. In some species there are also a set of hairs placed at the throat of the corolla on the two middle petals, the use of which Mr. Ralph thinks to be to shut out the ingress of the proboscis of the insect in that direction.

#### ZOOLOGICAL SOCIETY.

July 14, 1846.—Wm. Yarrell, Esq., Vice-President, in the Chair.

Mr. Lovell Reeve read a paper containing "Descriptions of forty new species of *Haliotis*, from the collection of H. Cuming, Esq.":—

The genus *Haliotis* affords an unusual abundance of novelty, from the circumstance of it never having been selected for the subject of an illustrated monograph; the species are, moreover, well-defined, and may be easily determined by a careful examination of the variations of sculpture and arrangement of colours.

The *Haliotides* are interesting in form as being the most evolved and depressed of spiral shells, and they have been arranged with the Chitons and Limpets as exhibiting the nearest apparent affinity with the non-spiral Gastropods. They present also a singularity of structure in great measure analogous to the orifice in the shell of *Fissurella* or to the fissure in *Emarginula*. On the left side of the shell, in a direct curve parallel to the inflexed edge, is a row of equidistant perforations, made by the animal in its progress of growth for conveying the water to the breathing organs; the mantle is slit in that direction to a certain extent, and the water passes into the respiratory cavity through a tubular filament protruding from each hole. The number of pallial filaments being alike in the same individual throughout its several stages of growth, the shell mostly presents the same number of holes at all ages, filling up the hindmost orifice as a new one becomes formed at the margin. The *Siliquaria* presents a similar modification of structure, and it has been also considered that the slit in *Pleurotoma* is in some measure analogous.

The internal surface of the 'Ear Shells' is lined with a bright pearly nacre, which in most species is of remarkable iridescent brilliancy, glowing with all the colours of the rainbow; the attention must, however, be directed to the outer coating of the shell, for the discrimination of species, and it is with this view that the figures in the foregoing monograph are devoted mainly to external sculpture. There is certainly a striking variation of character in the nacre of different species, but the pattern of the inner surface is merely an indentation of the outer. The number of perforations varies in different species, but may be said to correspond in different individuals of the same species; where an exception occurs, it is that there is sometimes one, or at most two, less in the adult than in the young state; that is, when the animal arrives at maturity it continues to stop up one or two of the perforations in advance of any new one.

It is a curious circumstance in the geographical distribution of the *Haliotides*, that few, if any, are to be found where Chitons abound; as if they exchanged places to a certain extent in the two hemispheres. There are a few species from California, but along the western coast of South America, where Chitons are most abundant, not any are found, and only one small species, the *H. pulcherrima*, at any of the islands of the Pacific. They inhabit the coasts of China, Japan, Ceylon, Mozambique, Cape of Good Hope, Borneo, and the Philippine Islands; but the greater number of species, and the most remarkable, are from New Zealand and the continent of New Holland, displaying all the peculiarity of design which invariably characterizes the fauna of those isolated regions. With the well-known *Haliotis tuberculata* of the Channel Islands, all are familiar. It is, however, a circumstance worth noting, that although such near neighbours, and comparatively abundant, especially at the island of Jersey, it is rarely collected on the coast of England.

The *Haliotides* are found at low water, attached to the under surface of masses of stone, and they fix themselves with great force to the rocks, by suction, on the least alarm.

*HALIOTIS SPLENDENS.* *Hal. testâ ovatâ, convexo-depressâ, undique spiraliter liratâ, liris crebris regularibus subobtusis, nonnullis aliis latioribus; foraminibus quinis perviis, extus ærugini-viridescente, articulis albicantibus prope spiram interdum notatâ, epidermide fibroso fusco indutâ, intus cæruleo viridique, nigricante nebulatâ, pulcherrimè iridescente.*

*Hab.* California.

*HALIOTIS JAPONICA.* *Hal. testâ ovato-oblongâ, subplanulato-convexâ, liris tenuibus æqualibus spiraliter funiculatâ, concentricè rugoso-plicatâ, plicis conspicuis lamellæformibus irregularibus; foraminibus quinis senisve perviis; luteo olivaceo-fusco viridique undique pulcherrimè variegatâ.*

*Hab.* Japan; Dr. Siebold.

*HALIOTIS COCCINEA.* *Hal. testâ oblongo-ovatâ, spiraliter liratâ, liris creberrimis inæqualibus interstitiis transversim minutissimè striatis; foraminibus confertiusculis, quinis senisve perviis; extus coccineo-rufâ, lutescente-albo maculatâ et variegatâ, intus argenteo-albicante.*

*Hab.* Cape de Verd Islands.

*HALIOTIS ZICZAC.* *Hal. testâ ovatâ, planulato-convexâ, spiraliter subtilissimè sulcatâ, foraminibus parviusculis, senis perviis; olivaceo-viridi, luteo-viridescente obliquè flammeo-undatâ, apice luteo-aurantio tinctâ, intus argentâ, iridescente.*

*Hab.* Calipan, island of Mindoro, Philippines (found on smooth stones); Cuming.

*HALIOTIS MULTIPERFORATA.* *Hal. testâ oblongo-ovatâ, subflexuosâ, anfractuum parte spirali subelevatâ; spiraliter lineari-sulcatâ, sulcis subundatis irregularibus; foraminibus parviusculis numero-*

*sis, decenis perviis; extus nigricante-fusco viridique variegatâ, intus albicante.*

*Hab.* — ?

**HALIOTIS DISCUS.** *Hal. testâ oblongo-ovatâ, elevato-convexâ, hic illic tumidâ et rugosâ, latere sinistro lato, peculiariter erecto; foraminibus amplis, subdistantibus, tubiferis, quaternis tantum perviis; castaneo-fuscâ, viridi aut rufescente radiatim tinctâ.*

*Hab.* Japan; Dr. Siebold.

**HALIOTIS SIEBOLDII.** *Hal. testâ subobliquè ovatâ, subpectinatâ, valdè convexâ, apice terminali, vix spirali; radiatim lirâtâ, liris obtusis, subdistantibus; foraminibus subamplis, quinis perviis; extus aurantio-rubrâ, intus albicante, iridescente.*

*Hab.* Japan; Dr. Siebold.

**HALIOTIS SQUAMATA.** *Hal. testâ oblongo-ovatâ, convexâ, spiraliter lirâtâ, liris creberrimis, squamatis, alternis majoribus; foraminibus octonis perviis; fuscâ et rubro-fuscâ, flammulis lutescentibus undatis ornatâ, intus vividè iridescente.*

*Hab.* North-west coast of Australia; Dring, H.M.S. Beagle.

**HALIOTIS FUNEBRIS.** *Hal. testâ ovatâ, subdepresso-convexâ, spiraliter lirâtâ, liris subsquamatis, hic illic majoribus, transversim peculiariter rugoso-plicatâ; foraminibus octonis aut novenis perviis; rubido-castaneâ, interdum viridi tinctâ, flammis perpaucis indistinctis circa spiram.*

*Hab.* New Holland.

**HALIOTIS DIVERSICOLOR.** *Hal. testâ ovatâ, subplanulatâ, spiraliter lirâtâ, liris obtusis irregularibus, transversim leviter plicatâ; foraminibus octonis vel novenis perviis; castaneo-fusco coccineo-rufo viridique radiatâ, maculis undatis lutescentibus variegatâ.*

*Hab.* New Holland.

**HALIOTIS COCCORADIATA.** *Hal. testâ suborbiculari, ovatâ, plano-convexâ, medio leviter depressâ, spiraliter subtiliter lirâtâ, liris striis minutis elevatis decussatis, foraminibus senis perviis; flavidd, strigis latis vividè coccineis radiatim pictâ.*

*Hab.* — ?

**HALIOTIS VIRIDIS.** *Hal. testâ ovatâ, depresso-convexâ, obliquè undato-rugatâ, spiraliter lirâtâ, lirarum interstitiis striatis, foraminibus quinis perviis; extus albicante, viridi pulcherrimè tinctâ et marmoratâ, intus argenteâ.*

*Hab.* — ?

**HALIOTIS ASTRICTA.** *Hal. testâ ovatâ, convexâ, spiraliter lirâtâ, liris laminis striisque elevatis irregularibus radiatim decussatis; foraminibus quaternis perviis; extus albidd, olivaceo viridique marmoratâ, intus iridescente.*

*Hab.* — ?

**HALIOTIS TAYLORIANA.** *Hal. testâ oblongo-ovatâ, solidiusculâ, convexâ, spirâ subterminali, spiraliter obtusè et irregulariter*

*liratá; foraminibus septenis ad novenis perviis; extus coccineofuscá, flavido, coccineofusco maculato, prope spiram, nebulatá; intus albicante.*

*Hab.* — ?

Named in honour of my worthy friend Thomas Lombe Taylor, Esq., of Starston, Norfolk.

**HALIOTIS RUBIGINOSA.** *Hal. testá ovatá, subdepresso-convexá, radiatim plicato-rugosá, spiraliter lirátá, liris obtusè squamatis, foraminibus subapproximatis, senis perviis; extus rubiginosocaurantiá, spiraliter albi-strigatá, intus argentéa.*

*Hab.* — ?

**HALIOTIS RUGOSA.** *Hal. testá ovatá, convexá, medio leviter depressá, radiatim plicato-rugosá, spiraliter lirátá, liris obtusis, hic illic majoribus; foraminibus subamplis, quaternis perviis; extus olivaceo-fusco viridique marmoratá.*

*Hab.* — ?

**HALIOTIS ROSACEA.** *Hal. testá ovatá, convexo-depressá, spiraliter crebriliratá, liris striis exsculptis undique decussatis; foraminibus peculiariter oblongo-ovatis, quaternis perviis; extus corallo-rubro et roseo-albicante marmoratá, rubro viridi punctato.*

*Hab.* — ?

**HALIOTIS PERTUSA.** *Hal. testá oblongo-ovatá, spiraliter posticè subtilissimè sulcatá, sulcis pertusis, anticè exiliter lirátá, sulcis lirisque subirregularibus et undatis; foraminibus senis perviis; extus rufo-fuscá, strigis perpaucis lutescentibus undatis prope spiram, intus vividè iridescente.*

*Hab.* — ?

**HALIOTIS PLANILIRATA.** *Hal. testá ovatá, plano-convexá, spiraliter lirátá, liris planulatis irregularibus; foraminibus quinque perviis; olivaceo- et cæruleo-viridi.*

*Hab.* — ?

**HALIOTIS SCUTULUM.** *Hal. testá convexá, spirá depressá, suboccultá, spiraliter exiliter lirátá, liris planulatis, undulatis, hic illic majoribus; foraminibus senis perviis; olivaceo-fuscá, viridi pulcherrimè articulatá, punctatá et maculatá.*

*Hab.* — ?

**HALIOTIS ZEALANDICA.** *Hal. testá oblongo-ovatá, subdepressá, spiraliter irregulariter sulcatá, liris intermediis obtusis, nunc latis, nunc angustis, senis perviis; rufo-castaneá et albicante peculiariter marmoratá.*

*Hab.* New Zealand.

**HALIOTIS SPECIOSA.** *Hal. testá oblongo-ovatá, plano-convexá, medio depressá, spiraliter elevato-striatá, striis confertis; foraminibus senis perviis; coccineo-rufá albo-nigricante marginatá, pulcherrimè variegatá.*

*Hab.* — ?

**HALIOTIS RETICULATA.** *Hal. testá oblongo-ovatá, anticè subattenu-*

*atá, plano-convexá, medio depressá, latere sinistro latiusculo, erecto, spiraliter vix striatá; foraminibus quaternis perviis; sordidè fuscá, maculis albidis reticulatis subtriangularibus ornatá.*

*Hab.* — ?

**HALIOTIS NEBULATA.** *Hal. testá oblongo-ovatá, convexá, spirá subelevatá, spiraliter sulcatá, sulcis parvis, undatis; foraminibus subapproximatis, septenis perviis; fusco roseoque undique nebulatá.*

*Hab.* — ?

**HALIOTIS SPICULATA.** *Hal. testá ovatá, spiraliter peculiariter lirátá, liris angustis, erectis, valdè irregularibus, radiatim undatoplicatá; foraminibus amplis, senis perviis; olivaceo-viridi, hic illic albipunctatá.*

*Hab.* — ?

**HALIOTIS SEMISTRIATA.** *Hal. testá ovatá, spiraliter subtiliter lirátá, radiatim undatoplicatá et plus minusve tuberculósá; foraminibus subtubiferis, quinis perviis; fuscá aut coccineo-rufá, albi-maculatá.*

*Hab.* Ceylon; Dr. Sibbald.

**HALIOTIS CLATHRATA.** *Hal. testá semicirculari-ovatá, spiraliter crebriliratá, interstitiis striis subtilissimè clathratis, radiatim plicatá; foraminibus subamplis, quinis perviis; viridi et vividè rufo variegatá.*

*Hab.* Baclayon, island of Bohol, Philippines; Cuming.

**HALIOTIS STOMATIÆFORMIS.** *Hal. testá oblongo-ovatá, valdè convexá, spiraliter striatá, radiatim subtiliter plicatá, spirá subterminali, elevatá; foraminibus quinis perviis; olivaceo viridique marmoratá.*

*Hab.* New Zealand.

**HALIOTIS ANCILE.** *Hal. testá ovatá, regulariter convexá, spiraliter exiliter noduloso-striatá, nodulis interdum subobscuris interruptis; foraminibus numerosis, parvis, octonis perviis; olivaceo-viridi, nodulis et circa spiram cupreo-roseis.*

*Hab.* — ?

**HALIOTIS DRINGII.** *Hal. testá orbiculari-ovatá, spiraliter striatá, radiatim plicatá et tuberculósá; foraminibus subtubiferis, quaternis perviis; extus pallidè viridescente-luteá, medio conspicuè coccineo tinctá, intus argentéa.*

*Hab.* North coast of Australia.

**HALIOTIS CONCINNA.** *Hal. testá suboblongo-ovatá, spiraliter striatá, medio leviter tuberculatá, obliquè subobscurè plicatá; foraminibus quaternis perviis; carneo-albicante, coccineo-roseo profusè variegatá.*

*Hab.* Zamboanga, island of Mindanao, Philippines; Cuming.

**HALIOTIS GEMMA.** *Hal. testá suborbiculari-ovatá, plano-convexá, latere sinistro latiusculo, spiraliter subtuberculatá, radiatim pulcherrimè minutè plicato-squamatá; foraminibus subtubiferis, quaternis quinive perviis; flavescente, coccineo viridique tinctá.*

*Hab.* — ?

**HALIOTIS LAUTA.** *Hal. testá ovatá, anticè attenuatá, undato-tumidá, spiraliter lirátá, liris subtilibus, confertis, striis minutis decussatis; foraminibus subamplis, quinis perviis; rubido et flavescente-albidá irregulariter marmoratá.*

*Hab.* Swan River Settlement, New Holland; Lieut. Preston.

**HALIOTIS PAPULATA.** *Hal. testá suborbiculari-ovatá, spiraliter obtuso-lirátá, liris subdistantibus, conspicuè tuberculatis; foraminibus subtubiferis, quaternis perviis; corallo-rubrd, flavescente varid.*

*Hab.* North coast of Australia; Dring.

**HALIOTIS JACNENSIS.** *Hal. testá oblongo-ovatá, spiraliter peculiariter rudè lirátá, liris valdè irregularibus, subsquamosis, prope foramina sublævigatá; foraminibus subtubiferis, distantibus; rufescente-aurantid, intus argented.*

*Hab.* Jacna, island of Bohol, Philippines.

**HALIOTIS PUSTULATA.** *Hal. testá oblongo-ovatá, spiraliter obscurè lirátá, tuberculis parvis pustulatá, radiatim plicatá; foraminibus senis perviis; albidá viridique marmoratá.*

*Hab.* — ?

**HALIOTIS AQUATILIS.** *Hal. testá oblongo-ovatá, plano-convexá, medio depressá, lævigatá, prope marginem peculiariter plicatá; foraminibus senis perviis; pallidè viridi, albido aut flavescente undato-variegatá, intus albicante.*

*Hab.* Kurile Islands, south of Kamtschatka.

**HALIOTIS JANUS.** *Hal. testá oblongo-ovatá, spiraliter lirátá, liris subtilibus angustis, interstitiis excavatis; foraminibus senis perviis; luteo-aurantid, fasciá latá albidá, fusco grandimaculatá, prope foramina ornátá.*

*Hab.* — ?

**HALIOTIS CRUENTA.** *Hal. testá ovatá, anticè subattenuatá, spirá elevatiusculá, spiraliter peculiariter undato- et corrugato-striatá; foraminibus subapproximatis, octonis perviis, sanguineo albi-punctato et albido sanguineo-punctato pulcherrimè variegatá.*

*Hab.* New Zealand.

**HALIOTIS INCISA.** *Hal. testá ovatá, medio subdepressá, spiraliter incisá, subtuberculiferá; foraminibus amplis, quaternis perviis; albidá et purpureo-viridi marmoratá, albido minutissimè rufo-punctatá.*

*Hab.* — ?

The next paper was also communicated by Mr. Lovell Reeve, and contained "Descriptions of fifty-four new species of *Mangelia*, from the collection of H. Cuming, Esq.":—

The *Mangelia* are nearest allied to those aberrant species of *Pleurotoma* in which the predominant character of that genus, the fissure in the upper extremity of the lip, becomes modified into a somewhat obscure sinus. Their general aspect is that of a more or less fusiform *Marginella*, without plaits or polished exterior; distinguished, on the other hand, by a row of faint wrinkle-like denticulations on the

inner surface of the lip and columella, and a gutter-like sinus in the lip at its junction with the body-whorl.

**MANGELIA SICULA.** *Mang. testá subfusiformi, spirá acuminatá, anfractibus rotundatis, gibbosiusculis, concentricè costatis, lævibus; aperturá brevi, ovatá, sinu subconspicuo; intus extusque castaneo-fuscá, labro flavicante, fusco-lineato.*

*Hab.* Sicily.

**MANGELIA VEXILLUM.** *Mang. testá oblongo-ovatá, anfractibus supernè depressis, nodosis, costis e nodis descendentibus, superficie totá decussatim striatá, quasi subtilissimè decussatá; aurantio-luteo, fasciis albicantibus angustis undique cingulatá.*

*Hab.* Ilo Ilo, isle of Panhay, Philippines (found under stones); Cuming.

**MANGELIA LYRA.** *Mang. testá trigono-fusiformi, anfractibus supernè angulatis, longitudinaliter costatis, costis subobliquis, ad angulum incrassatis; castaneo-fuscá, lineis albicantibus decussatis, labro albicante.*

*Hab.* Island of Ticao, Philippines (found on the sands); Cuming.

**MANGELIA ANTILLARUM.** *Mang. testá subpyriformi-ovatá, lævigatá longitudinaliter concentricè costatá, costis fortibus, subobtusis distantibus; cinereo-carnæ, costis fasciá rubidá tinctis, labro albicante, rubido fusciam tincto.*

*Hab.* West Indies.

**MANGELIA MARGINELLOIDES.** *Mang. testá pyriformi-ovatá, spirá brevi, acutá; anfractibus supernè angulatis, longitudinaliter multicostatis, costis tenuibus, crebris, suturis descendentibus; lacteo-cæruleá aut cinereo-fuscá, lineis rubidis cingulatá, anfractús ultimi parte supra angulum maculá grandi nigricante conspicuè tinctá.*

*Hab.* Island of Burias, Philippines (found in sandy mud at the depth of seven fathoms); Cuming.

**MANGELIA FUNICULATA.** *Mang. testá trigono-fusiformi, subelongatá, anfractibus supernè depressis, longitudinaliter tenuicostatis, lævibus; cinereo-fuscá, costis labroque albicantibus.*

*Hab.* Islands of Ticao and Masbate, Philippines (found on the sands); Cuming.

**MANGELIA CAVERNOSA.** *Mang. testá oblongo-ovatá, spirá angulato-turrítá; anfractibus supernè angulatis, intra costis cavernosis, costis fortibus, obtusis, suturis descendentibus; albá, aurantio-fusco hic illic sparsim maculatá.*

*Hab.* Island of Ticao, Philippines (found on the sands); Cuming.

**MANGELIA CYLINDRICA.** *Mang. testá cylindræo-fusiformi, apice acutá, longitudinaliter subtiliter costatá, transversim elevato-striatá; pellucido-albá, fuscescente tinctá, aurantio-fusco infra suturas maculatá.*

*Hab.* Cagayan, island of Mindanao, Philippines (found in sandy mud at the depth of twenty-five fathoms); Cuming.

**MANGELIA CAPILLACEA.** *Mang. testá ovato-fusiforimi; spiræ suturis profundis; anfractibus supernè depressis, transversim subtilissimè et creberrimè elevato-striatis, longitudinaliter costatis, angustis, suberectis, supernè leviter mucronatis; fuscescente, lineis subtilibus fuscescentibus zonatá.*

*Hab.* Island of Burias, Philippines (found among coarse sand at the depth of seven fathoms); Cuming.

**MANGELIA GRACILIS.** *Mang. testá gracili-fusiforimi, transversim subtilissimè striatá, longitudinaliter costatá, costis angustis; albá, castaneo-fusco indistinctè zonatá et maculatá.*

*Hab.* Island of Ticao, Philippines (found under stones at low water); Cuming.

**MANGELIA LAMELLATA.** *Mang. testá fusiforimi-ovatá, spiræ suturis profundis, subcavernosis, anfractibus transversim elevato-striatis, striis fortibus, subdistantibus, longitudinaliter costatis, costis angustis, erectis, lamellæformibus, supernè leviter mucronatis; albidá, fusco pallidissimè zonatá.*

*Hab.* Isle of Burias, Philippines (found among coarse sand at the depth of seven fathoms); Cuming.

**MANGELIA VITTATA.** *Mang. testá oblongo-ovatá, subconicá, spirá brevi, obtusá; anfractibus longitudinaliter costatis, costarum interstitiis striis fortibus clathratis; albidá, olivaceo-fusco latifasciatá, costarum parte olivaceo-fusca albigulatá.*

*Hab.* Island of Ticao, Philippines (found on the sands); Cuming.

**MANGELIA ZONATA.** *Mang. testá abbreviato-fusiforimi, spirá breviusculá, turritá suturis profundis; anfractibus longitudinaliter costatis, costis e suturis descendentibus; lævigatá; albá, zoná conspicuá aurantio-fusca cingulatá.*

*Hab.* Island of Ticao, Philippines (found on the sands); Cuming.

**MANGELIA INTERRUPTA.** *Mang. testá oblongo-ovatá, spirá brevi, anfractibus supernè nodosis, costis e nodis descendentibus; albá, lineis nigris subtilissimis transversis interruptis, creberrimè dispositis, inter costas ornatá.*

*Hab.* Island of Ticao, Philippines (found on the sands); Cuming.

**MANGELIA RETICULATA.** *Mang. testá fusiforimi-ovatá, spirá breviusculá, apice acuminatá; anfractibus supernè perpendiculariter compressis, deinde tumidiusculis et longitudinaliter costatis, costarum interstitiis exiliter fusco-punctatis.*

*Hab.* Island of Ticao, Philippines (found on the reefs); Cuming.

**MANGELIA PULCHELLA.** *Mang. testá fusiforimi-ovatá, subcylindraceá, spirá breviusculá, apice acuminatá; anfractibus supernè rotundatis, longitudinaliter multicostatis, costis tenuibus gracilibus, concentricè dispositis, anfractuum superficie totá exilissimè reticulatá; luteo-albicante, maculis quadratis parvis rufis costarum interstitiis fasciatim cingulatá.*

*Hab.* Island of Ticao, Philippines (found on the sands); Cuming.

**MANGELIA FUSIFORMIS.** *Mang. testá fusiforimi, anfractibus su-*



*pernè subangulatis, ad angulum nodosis, costis tenuibus subsuperficiariis e nodis descendantibus, transversim creberrimè striatis; luteo-albicante, punctis perpaucis aurantio-fuscis tinctis.*

*Hab.* Island of Corrigidor, Philippines (found among coarse sand at the depth of ten fathoms); Cuming.

*MANGELIA LYRICA.* *Mang. testá fusiformi, utrinque acuminatá, anfractibus longitudinaliter concentricè costatis, transversim elevato-striatis; fuscescente, aurantio-fusco pallidè et indistinctè fasciatá.*

*Hab.* Island of Burias, Philippines (found among coarse sand at the depth of seven fathoms); Cuming.

*MANGELIA GIBBOSA.* *Mang. testá ovato-conicá, spirá brevissimá; anfractibus supernè gibbosis et nodulosis, longitudinaliter costatis, levigatis; cinereo-albicante, lineis aurantio-fuscis exilibus cingulatá, dorso supernè nigricante tincto.*

*Hab.* Island of Ticao, Philippines (found on the reefs); Cuming.

*MANGELIA MACULATA.* *Mang. testá subfusiformi, basi truncatá, longitudinaliter costatá, costis tenuibus subdistantibus, concentricè dispositis; sinu latiusculo; alba, maculis subquadratis aurantio-fuscis inter costas.*

*Hab.* Island of Ticao, Philippines (found under stones at low water); Cuming.

*MANGELIA TURRICULA.* *Mang. testá fusiformi-turritá, suturis profundis; anfractibus plano-depressis, longitudinaliter concentricè costatis; albicante, lineis subtilissimis aurantio-fuscis obsoletè cingulatá.*

*Hab.* Island of Ticao, Philippines (found on the sands); Cuming.

*MANGELIA COLUMBELLOIDES.* *Mang. testá ovatá, spirá brevi, acutá; anfractibus supernè leviter rotundatis, transversim elevato-striatis, longitudinaliter tenuicostatis, labro medio tumido, intus fortiter denticulato; nived, costis eximè aurantio-fusco punctatis.*

*Hab.* Baclayon, island of Bohol, Philippines (found on mud banks); Cuming.

*MANGELIA CONOHELICOIDES.* *Mang. testá ovato-conicá, spirá brevissimá, acutá; anfractibus transversim elevato-striatis, longitudinaliter multiliratis, liris tenuibus, ante suturas evanidis; luteo-albicante, dorso maculá grandi aurantio-fusca interdum tincto.*

*Hab.* Daleguete, isle of Zebu, Philippines (found under stones); Cuming.

*MANGELIA TENEBROSA.* *Mang. testá subfusiformi, spirá acuminato-turritá; anfractibus supernè plano-depressis, suturis profundis, transversim striatis, longitudinaliter costatis, costis distantibus; intus extusque castaneo-fusca.*

*Hab.* Cagayan, island of Mindanao (found in sandy mud at the depth of twenty-five fathoms); Cuming.

*MANGELIA NOVÆ HOLLANDIÆ.* *Mang. testá ovatá, infernè attenuatá, subconicá, spirá brevi; anfractibus supernè rotundatis, lon-*

*gitudinaliter obliquè costatis; livido-cinerea, apice basique nigricantibus, labro albido, aperturae fauce fusca.*

*Hab.* Swan River.

**MANGELIA LIVIDA.** *Mang. testá subfusiformi-ovatá, apice acuminatá; anfractibus longitudinaliter concentricè costatis, costis tenuibus; livido-carneda.*

*Hab.* Island of Ticao, Philippines (found on the reefs); Cuming.

**MANGELIA ABYSSICOLA.** *Mang. testá oblongo-ovatá, utrinque conspicuè attenuatá, longitudinaliter costatá, lineis elevatis cingulatá; albida, fusco zonatá.*

*Hab.* Island of Mindanao, Philippines (found in sandy mud at the depth of twenty-five fathoms); Cuming.

**MANGELIA BICOLOR.** *Mang. testá oblongá, concentricè costatá, costarum interstitiis subtilissimè striatis; supra albida, infra plumbea.*

*Hab.* Island of Ticao, Philippines; Cuming.

**MANGELIA FUNEBRIS.** *Mang. testá oblongá, concentricè costatá, costarum interstitiis levibus; albida fasciatá plumbea latá cingulatá.*

*Hab.* Island of Ticao (found under stones at low water); Cuming.

**MANGELIA STROMBOIDES.** *Mang. testá fusiformi-ovatá, spirá subturritá; anfractibus supernè angulatis, longitudinaliter costatis, costis ad angulum nodosis, interstitiis subtilissimè striatis; albida.*

*Hab.* Island of Bohol, Philippines.

**MANGELIA PALLIDA.** *Mang. testá ovatá, concentricè costatá, costis subobtusis; albá.*

*Hab.* Island of Ticao, Philippines; Cuming.

**MANGELIA PESSULATA.** *Mang. testá cylindraco-oblongá, spirá breviusculá, longitudinaliter eximè subobliquè costatá, costarum interstitiis subtilissimè striatis; nivea.*

*Hab.* Philippine Islands; Cuming.

**MANGELIA RIGIDA.** *Mang. testá ovatá, longitudinaliter fortiter tuberculato-costatá, transversim subtilissimè striatá; fuscescente.*

*Hab.* Ægean Sea; Forbes.

**MANGELIA ELEGANS.** *Mang. testá oblongá, spirá breviusculá, acuminatá, anfractibus supernè angulatis, longitudinaliter costatis, costis angustis, ad angulum mucronatis, costarum interstitiis pulcherrimè elevato-striatis; lutescente-albá, exilissimè fusco-zonatá.*

*Hab.* Island of Mindoro, Philippines; Cuming.

**MANGELIA LINEATA.** *Mang. testá ovatá, spirá acuminatá; concentricè obtuso-costatá, levigatá; carneo-fuscescente, lineis saturatoribus undique cingulatá.*

*Hab.* — ?

**MANGELIA PLANILABRUM.** *Mang. testá fusiformi, utrinque acuminatá, levissimá, anfractibus supernè depressis, longitudinaliter*

*costatis; labro planulato, supra subangulato; cinereo-purpurascete, albizonato.*

*Hab.* Island of Ticao, Philippines; Cuming.

**MANGELIA HORNBECKII.** *Mang. testá ovatá, spirá breviusculá, acutá, suturis profundis, subcavernosis, longitudinaliter costatá, costis prominentibus, transversim subtilissimè striatá, albá.*

*Hab.* Island of St. Thomas, West Indies; Dr. Hornbeck.

**MANGELIA CASTANEA.** *Mang. testá oblongá, spirá acuminatá, concentricè tenuicostatá, costarum interstitiis striatis; castaneo-fuscá.*

*Hab.* Island of Burias, Philippines; Cuming.

**MANGELIA PUSILLA.** *Mang. testá fusiformi-ovatá, lævigatá, longitudinaliter costatá, costis solidiusculis obtusis; albidá, castaneo copiosè tinctá et lineatá.*

*Hab.* — ?

**MANGELIA MARMOROSA.** *Mang. testá ovatá, solidiusculá, spirá breviusculá; longitudinaliter costatá, costis obesis, striis elevatis, decussatis; sinu amplo; albá, aurantio-fusco perparce maculatá.*

*Hab.* — ?

**MANGELIA CASTA.** *Mang. testá ovato-turritá, longitudinaliter costatá, costis tenuibus subdistantibus, lævigatá; aperturá brevi, basi truncatá; carneo-fuscá, obscurè fasciatá, costis albicantibus.*

*Hab.* — ?

**MANGELIA OBELISCUS.** *Mang. testá subulatá, hexagoná, basi truncatá, striis pulcherrimis elevatis undique creberrimè cingulatá, longitudinaliter costatá, costis distantibus, sequentibus; aperturá minutá, ovatá; sordidè albá, aperturae fauce lutescente.*

*Hab.* Islands of Corrigidor, Philippines (found among coarse sand at the depth of ten fathoms); Cuming.

**MANGELIA BALTEATA.** *Mang. testá elongatá, subfusiformi, longitudinaliter costatá costis angustis, distantibus; albá, zoná fuscá conspicuá cingulatá.*

*Hab.* — ?

**MANGELIA ASTRICTA.** *Mang. testá subfusiformi-ovatá, spirá breviusculá, suturis profundis; longitudinaliter costatá, costis crebriusculis; albidá, zoná fuscá angustá cingulatá.*

*Hab.* — ?

**MANGELIA BADIA.** *Mang. testá fusiformi-ovatá, concentricè plicatocostatá, transversim fortiter striatá; castaneo-fuscá.*

*Hab.* — ?

**MANGELIA PELLUCIDA.** *Mang. testá ovatá, utrinque attenuatá, lævigatá, pellucidá, nitidá, longitudinaliter crebricostatá; albidá, basi fuscá.*

*Hab.* — ?

**MANGELIA ANGULATA.** *Mang. testá fusiformi-ovatá, anfractibus medio peculiariter angulatis, suturis profundis, longitudinaliter costatis, costis angulos super mucronatis; albidá, fuscescente lineatá.*

*Hab.* Bay of Manila (found in sandy mud at the depth of four fathoms); Cuming.

**MANGELIA PURA.** *Mang. testá oblongo-ovatá, spirá subturritá, suturis profundis; anfractibus concentricè costatis; albidd, maculis perpaucis aurantio-fuscis.*

*Hab.* — ?

**MANGELIA SOLIDA.** *Mang. testá cylindraceo-ovatá, utrinque attenuatá, solidá, undique creberrimè granoso-clathratá; aperturá longiusculá; purpurascete.*

*Hab.* Island of Burias, Philippines (among sand at the depth of seven fathoms); Cuming.

**MANGELIA DERELICTA.** *Mang. testá ovatá, longitudinaliter fortiter concentricè costatá, transversim subobsoletè striatá; fuscescente.*

*Hab.* — ?

**MANGELIA ZEBUENSIS.** *Mang. testá ovato-oblongá, spirá acuminatá, basi subattenuatá, concentricè fortiter costatá, transversim creberrimè striatá; fuscescente.*

*Hab.* Island of Zebu, Philippines (found in sandy mud at the depth of four fathoms); Cuming.

**MANGELIA CINCTA.** *Mang. testá subfusiformi-ovatá, spirá turritá, suturis subprofundis; anfractibus supernè angulatis, longitudinaliter costatis, costis distantibus; albidd, anfractibus fasciá latá fuscescente supernè cinctis.*

*Hab.* Island of Bohol, Philippines (found under stones at low water); Cuming.

**MANGELIA DIGITALIS.** *Mang. testá fusiformi-ovatá, solidá, undique creberrimè granoso-clathratá; albicante, zonis duabus purpureis angustis cingulatá.*

*Hab.* — ?

**MANGELIA NANA.** *Mang. testá ovatá, spirá brevi, turritá, apice acutá; anfractibus supernè angulatis, longitudinaliter obliquè costatis, interstitiis cavis, subtiliter striatis.*

*Hab.* Island of Mindanao, Philippines (found in sandy mud at the depth of twenty-five fathoms); Cuming.

## MISCELLANEOUS.

### ON THE DEVELOPMENT OF THE MEDUSÆ.

DR. REID directed the attention of the Society to some observations he had made on the young of the Medusæ. He mentioned, that many of the members of the Society were probably not aware, that the researches of Sars and Siebold had shown that the young of the Medusæ (the common sea-nettles and sea-blubber of our coasts) live for a time like polypes; and that, during their polype life, they generate other animals like themselves, all of which afterwards become Medusæ. This very curious fact has of late naturally attracted a